

CLAIMS

1. Method for manufacturing a ball for a ball game, said ball comprising:

5 (a) a bladder including a valve for introducing air into said bladder;

(b) a fabric layer located on the outer surface of said bladder comprising a plurality of fabric pieces,

10 wherein each of said plurality of fabric pieces has marginal edges which are folded inwardly,

wherein said marginal edges of adjacent fabric pieces are sewn together with a sewing machine, so that said plurality of fabric pieces are joined to have a spherical shape

15 wherein a valve opening is formed in a first one of said plurality of fabric pieces, and a hole for reversing said fabric layer and for accommodating said bladder is formed in a second one of said plurality of fabric pieces wherein the second one of said plurality of fabric pieces is located opposite the first one of said plurality of fabric pieces; and

20 (c) a skin layer located on the outer surface of said fabric layer, said skin layer comprising a plurality of panels;

said method comprising the steps of:

(i) forming the fabric layer by superposing two adjacent fabric pieces, sewing along a marginal edge of the superimposed fabric pieces with a sewing machine, locating said marginal edge on the outer side of
25 the fabric layer and repeating until all fabric pieces are joined to form a spherical fabric layer;

(ii) reversing said fabric layer through said hole to locate said

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marginal edges on an inner side of the fabric layer;

(iii) inserting said bladder into the fabric layer through said hole within said fabric layer;

(iv) closing said hole; and

5 (v) forming said skin layer on an outer surface of said fabric layer.

2. The method of claim 1, wherein a patch is abutted onto a peripheral part of said hole, and said patch is adhered to said fabric
10 piece whereby said hole is closed.

3. The method of claim 1, wherein a patch is abutted onto a peripheral part of said hole, said patch is sewn to said fabric piece with a sewing machine through said valve opening formed in said fabric layer.
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4. The method of claim 1, wherein a patch is abutted onto a peripheral part of said hole, said patch is sewn to said fabric piece by hand stitching.

20 5. The method of claim 1, wherein said hole comprises two slits, which perpendicularly bisect each other, said slits having a minimum length of 20mm.

25 6. The method of claim 1, wherein said hole comprises two slits, which perpendicularly bisect each other, said slits having a maximum length which is determined by the distance from the ends of said slits to the peripheral edges of said fabric piece being at least

10mm.

7. The method of claim 6, wherein said hole is closed through said valve opening using a sewing machine.

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8. The method of any one of claims 1 to 7, wherein said fabric layer comprises twelve right pentagonal fabric pieces.

9. The method of any one of claims 1 to 8, wherein each of
10 said fabric pieces comprises two fabric layers laminated to each other, whereby the warp direction of the first fabric layer is perpendicular to the warp direction of the second fabric layer.

10. The method of any one of claims 1 to 9, wherein each of
15 said plurality of panels comprises a surface layer and a shock absorbing layer adhered to a rear surface of said surface layer, wherein marginal edges of said surface layer are inwardly turned by 90 degrees, whereby the side surfaces of said shock absorbing layer are covered with said inwardly turned marginal edges, and wherein said panels are
20 adhered to said fabric layer with adhesive.

11. The method of claim 10, wherein an inwardly turned marginal edge of one of said plurality of panels is adhered to an inwardly turned edge of an adjacent panel with adhesive.

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12. The method of any one of claims 1 to 9, wherein said skin layer is formed by superposing two adjacent panels, sewing the

marginal edges of said superimposed panels together, opening out the superimposed panels in such a manner that said marginal edges are located on an inner side of the skin layer and repeating until all the panels are joined to form a spherical skin layer.

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13. The method of claim 12, wherein said skin layer is adhered to said fabric layer with adhesive.

14. Method for manufacturing a ball for a ball game, said ball
10 comprising:

(a) a bladder including a valve for introducing air into said bladder;

(b) a fabric layer located on the outer surface of said bladder comprising a plurality of fabric pieces,

15 wherein each of said plurality of fabric pieces has marginal edges which are folded inwardly,

wherein said marginal edges of adjacent fabric pieces are sewn together with a sewing machine, so that said plurality of fabric pieces are joined to form a spherical shape; and

20 (c) a skin layer located on the outer surface of said fabric layer, said skin layer comprising a plurality of panels;

said method comprising the steps of:

(i) forming a hole in one of said plurality of fabric pieces;

25 (ii) superimposing two adjacent fabric pieces, sewing along a marginal edge of the superimposed fabric pieces with a sewing machine, locating all of said marginal edges on an outer side of the fabric layer and repeating until all fabric pieces are joined to form a spherical

fabric layer;

(iii) reversing said fabric layer through said hole, and locating all of said marginal edges on the inner side of the fabric layer, ;

(iv) inserting said bladder into the fabric layer through said
5 hole;

(v) abutting a patch on said hole from the inner side of said fabric layer to close said hole; and

(vi) forming said skin layer on the outer surface of said fabric layer.

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15. Ball for ball game comprising:

a bladder including a valve for introducing air into said bladder;

a fabric layer located on the outer surface of said bladder;
15 and

a skin layer located on the outer surface of said fabric layer, said skin layer comprising a plurality of panels;

wherein said fabric layer comprises a plurality of fabric pieces which are connected to each other to form a spherical shape;

20 wherein all parts of the fabric layer which prevent said fabric layer from forming a spherical shape are located on the inner side of said fabric layer, said parts being formed as a result of connecting said plurality of fabric pieces to each other;

25 wherein said parts which prevent said fabric layer from forming a spherical shape are absorbed by deformation of the bladder, whereby the outer surface of said fabric layer has a complete spherical shape, such that the spherical shape of the outer surface of said skin

layer is maintained. ~